

Supporting Information

Highly Sensitive Simultaneous Detection of Mercury and Copper Ions by Ultrasmall Fluorescent DNA-Ag Nanoclusters

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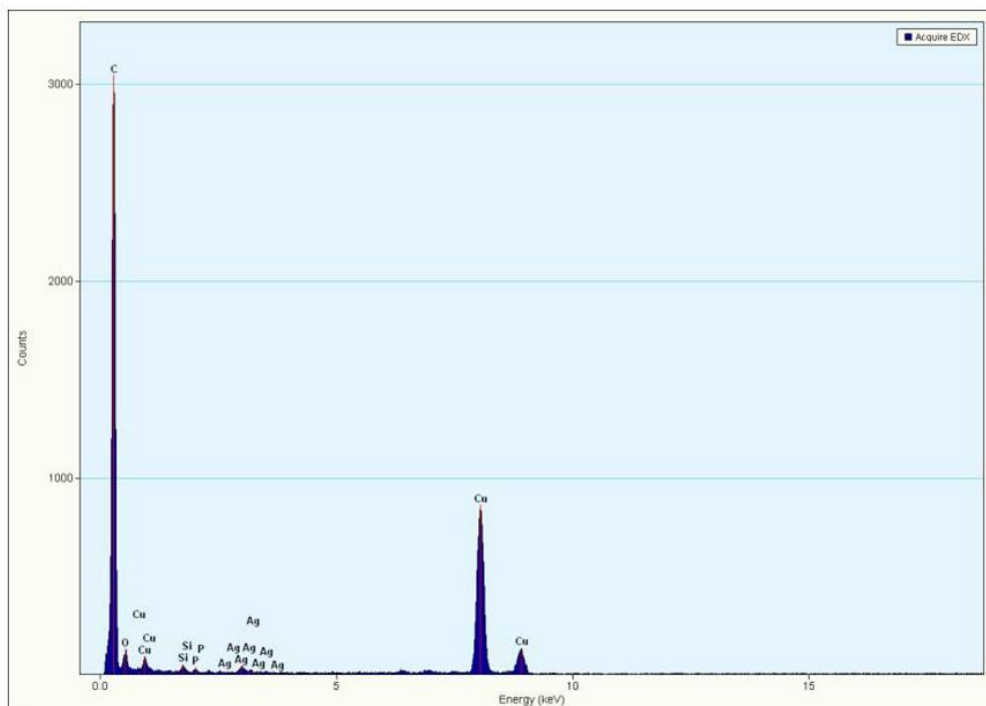
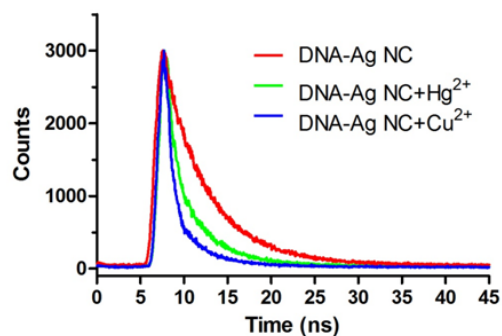


Fig. S1 Energy-dispersive-X-ray spectroscopy (EDX) experiments confirm the presence of elemental Ag in DNA-Ag NC samples



	τ_1 [ns]	α_1	τ_2 [ns]	α_2	τ_{av} [ns]
DNA-Ag NC	5.4	84.14%	2.6	15.86%	5.0
DNA-Ag NC+Hg²⁺	4.2	64.87%	7.4	35.13%	5.4
DNA-Ag NC+Cu²⁺	3.9	43.85%	6.2	56.15%	5.2

Fig. S2 Fluorescence decay curves of DNA-Ag NCs in the absence (red) and presence of Hg²⁺ (1 μ M, green) and Cu²⁺ (1 μ M, blue), and the corresponding fit curves.

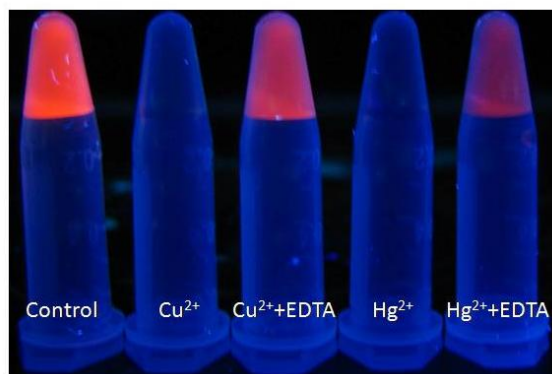


Fig. S3 The DNA-Ag NC sensor system can be renewed using EDTA.

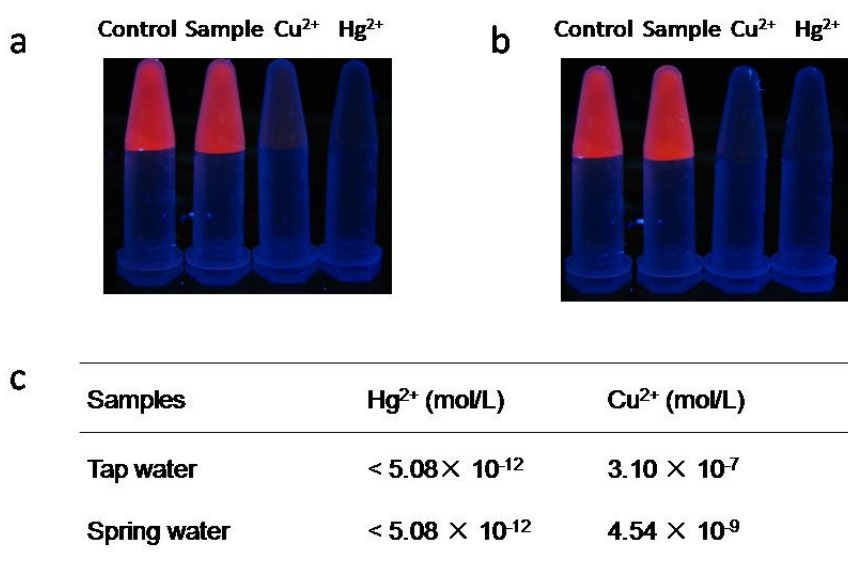


Fig. S4 Determination of Hg²⁺ and Cu²⁺ in tap water (a) and spring water (b) samples with DNA-Ag NCs. (c) Determination of Hg²⁺ and Cu²⁺ concentrations in real water samples by ICP-MS analysis.